NPS 54-77-01

# NAVAL POSTGRADUATE SCHOOL
## Monterey, California

A THEORY AND RESEARCH INSTRUMENTS

FOR

STUDYING U.S. NAVAL OFFICER CAREERS
by

C. Brooklyn Derr

August 1977

Approved For Public Release, Distribution Unlimited

NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

Rear Admiral Isham Linder
Superintendent

Jack R. Borsting
Provost

Reproduction of all or part of this report is authorized.

This report was prepared by:

| REPORT DOCUMENTATION PAGE | | READ INSTRUCTIONS BEFORE COMPLETING FORM |
|---|---|---|
| 1. REPORT NUMBER<br>NPS 54-77-01 | 2 GOVT ACCESSION NO | 3. RECIPIENT'S CATALOG NUMBER |
| 4. TITLE (and Subtitle)<br>A Theory and Research Instruments for Studying U.S. Naval Officer Careers | | 5. TYPE OF REPORT & PERIOD COVERED<br>Interim Report |
| | | 6. PERFORMING ORG. REPORT NUMBER |
| 7. AUTHOR(s)<br>C. Brooklyn Derr | | 8. CONTRACT OR GRANT NUMBER(s)<br>NR 170-836 |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS<br>Naval Postgraduate School<br>Monterey, California 93940 | | 10. PROGRAM ELEMENT. PROJECT, TASK AREA & WORK UNIT NUMBERS<br>N0001477WR70055 |
| 11. CONTROLLING OFFICE NAME AND ADDRESS<br>Organizational Effectiveness Research Programs<br>Office of Naval Research (Code 452)<br>Arlington, Va. 22217 | | 12. REPORT DATE<br>August, 1977 |
| | | 13. NUMBER OF PAGES<br>39 |
| 14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) | | 15. SECURITY CLASS. (of this report)<br>UNCLASSIFIED |
| | | 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE |

16. DISTRIBUTION STATEMENT (of this Report)

Approved for Public Release, Distributing Unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

| career | career values | second careers |
| career concepts | career stages | family career concerns |
| career anchors | adult life stages | career politics |

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Career patterns are influenced as much by the individual as by the organization. They are often based on ones own definition of career success; his work values, motives and attitudes; his career stage and adult life stage development as they dynamically interrlate; family concerns (including the influence of the spouse); and the various options which are largely dependent on career politics. The author outlines the above theoretical concepts and suggests interview questions and questionnaire items to study these constructs. A bibliography is included.

DD $_{1 \text{ JAN } 73}^{\text{FORM}}$ 1473    EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6601 |

A Theory And Research Instruments

For Studying U.S. Naval Officer Careers

# I.   INTRODUCTION

The Navy of the future is faced with some complex personnel problems which
could impair combat readiness and the effective utilization of advanced tech-
nology and "hardware".  For example, it has been estimated that some 23,000 high-
skilled position classifications are manned by unrated sailors.  (Elster, 1976).
Unless the manpower shortage is resolved in the sub-surface community, some sub-
marines may not be operational in 1980's.  (Elster, 1976).  Moreover, advanced
hardware systems often lack the people to run them and this problem may get more
intensified in the future.  Among the officer cadre of the U.S. Navy, and espe-
cially within some communities, retaining top-quality personnel is of utmost
importance--and it may prove difficult.  While the current officer shortage appears
most serious in the 5-12 year experience range, it has been predicted that some
40% of officers leave the Navy before the twelve year period, which, in turn, is
costly in terms of training and applied future experience.  (Robertson, 1975).

Research is needed which uncovers information about Naval officer careers
in general and careers within Naval communities (e.g. surface warfare).  Practical
recommendations might result for career re-enlistment, enhancement and productivity.
This would in turn address some of the problems stated above as well as suggest
some possibilities for more effectively managing scarce human resources.

Many career programs to date (especially those in the military) have focused
on two common threads:  first, the idea of the career as job placement rather
than a total work-life experience;  second, the emphasis on fitting the person
into the organizational career slot, based on some manpower planning and pre-
scribed career ladders, without, coincidentally, trying to match the needs of the
individual with those of the enterprise.

It is the underlying premise of this research that the career must be under-
stood from the employee's perspective if the organization is to arrive at a
long-term program of worker participation, motivation, retention and productivity.
Indeed, the definition of career in this study is as much or more the product of
the individual as it is of the organization.  A career is:

> A sequence of work-related experiences
> which reflects how a person thinks and
> acts over time regarding his own internal
> definition of work success.

Such a point of view considers the career to be very long-term.  It comprises
many job experiences over time (for most, over a lifetime), and changing careers
requires a different orientation to work (e.g. changing fields or professions)
as opposed to short-term job hopping.  Moreover, career success is defined by
the individual according to his values, concepts and options.  It serves as a
guide to his career attitude and actions over time.  The individual, as part of
the person-organization career matching equation, is, therefore, a critical
component.

## II.  THE NATURE OF THE STUDY

The research to be undertaken focuses on Naval officer careers from the
"personal" perspective.  It is an attempt to uncover evidence leading to a better
understanding of their career agendas, motives, satisfactions and discontentments,
non-work issues which overlap into their jobs and, in general, concerns of a
personal nature which might cause them to or prevent them from fully responding
to the Navy's career program.  The practical implications for the study are to
discover ways to enhance Naval officer retention, satisfaction and productivity.

Five different communities of Naval officers are to be studied:  air, surface,
subsurface, civil engineering corps, supply.  It is hoped that not only will
valuable insights about Naval officer's careers, as a subset of all careers, be
unfolded but, in addition, interesting differences between these various com-
munities will be discovered.

A sample of Navy wives, the wives of some of the officers also being examined, in these five communities will be queried. This part of the study focuses on gaining the perceptions of the wives about how their husband's career impacts on and is influenced by them. Also, it is an attempt to validate research findings.

Twenty-five officers, five from each of the above Navy communities, and their wives will be examined from among the population of officer-students at the Naval Postgraduate School. Another five officers from each community at the school will also be queried for a total of ten officers and five wives from each community. In addition, ten officers from each of the five Naval communities who are currently on duty in a regular wartime (seagoing) billet will be studied.

Schein (1975) discovered during his career anchor research that more personal and sensitive aspects of a career (e.g. values) were best studied via in-depth clinical interviews. Moreover, Alderfer (1968) determined that questionnaires distributed after an open-ended interview provoke more "open" and "honest" responses than do those where no interview is held. Furthermore, since individuals tend to act based on their perceptions, perceptual data is considered appropriate. This research, therefore, will primarily consist of in-depth interviews covering the following theoretical issues. A brief questionnaire will be distributed at the end of each interview to compliment and quantify some items.

III. THEORETICAL PERSPECTIVE

In addressing the general questions introduced above, the literature and research in the five following areas of inquiry has been reviewed: career success, career anchors, career-life stages, family-career concerns, and career politics. It is proposed that these concepts are promising as theoretical premises to study the individual's perspective on his career.

A. Career Success. Hall (1976) points out multiple definitions of the term "career." Some classify it as following and ascending over time the company's career path or accepting its definition of becoming successful. Some view it as passing through a series of stages to becoming a full-fledged member

of ones profession (irrespective of any particular organization).  Or, the career

may be viewed as a life-long sequence of jobs or roles.  There are even those who

feel that the term means ones total personal history through life, not just ones

work history.

Driver (1977) hypothesizes four types of career concepts:  transcient, steady

state, linear and spiral.  He then relates these concepts to five career charac-

teristics:  when one chooses his career, the degree of permanence of the career,

the direction of career change when that occurs, the central motive behind a

certain career orientation and the cognitive style or primary decision-making mode

typical of that career type.  The table below summarizes these concepts.

Table I

Driver's Career Concepts

|  | Career Concept | (a) Choice Time | (b) Permanence | (c) Change Direction | (d) Central Motive | (e) Cognitive Style |
|---|---|---|---|---|---|---|
| (1) | Transi-ent | contin-uous | yearly changes | usually lateral | indepen-dence | flexible |
| (2) | Steady State | youth | for life | none | security | decisive |
| (3) | Linear | youth | for life | upward mobility | achieve-ment | hierarchic |
| (4) | Spiral | cyclical | 5-7 years | lateral mobility | growth | integrative |
| (5) | Second-Career | mid-life | bi-lifetime | newness | growth/ crisis,forced situation | searching |

Some explorative research has been done by Driver on the linear and spiral con-

cepts and the above hypothesized relationships tend to be correlated with motive

and cognitive style.

Derr's preliminary interviews among officer-students at the Naval Post-

graduate School[*] indicate that a fifth career concept, building on Driver's

--------------------

[*]    In two sections of MN 3105 (Introduction to Organization and
      Management) and one section of MN 3127 (Seminar on Careers).

ideas, is that of second-career orientation.  The time of career choice is norm-
ally at mid-life or ages 40-48.  The permanence is about every twenty years or
bi-lifetime.  The change direction is sometimes lateral mobility but often
towards newness.  The central motives may be growth, crisis or, as in the case
of the military, early retirement (forced and voluntary).  The cognitive style is
 probably one of searching.

B.  <u>Career Anchors</u>.*  Manager efficiency, productivity, and morale appear to
be related to the appropriateness of the match between the individuals own needs/
values/objectives and the needs/values/objectives of the organization for which
the person works.  In the case of the Navy, for example, if an officer's basic
value orientations can be identified and matched with the needs and programs of
the Navy, this match should generate greatly improved rewards and benefits for
both the Navy and the officer.

Schein's work (1975) uncovers basic values, motives, needs and talents which
keep an individual pursuing a certain kind of career.  He terms these "career
anchors."  The career can be said to be anchored over time in the set of needs or
motives which the individual continuously attempts to fulfill through work and
the rewards obtained from work.

The basis for the development of the "career anchors" concept was a study
Schein conducted of students selected at random from the Sloan School of Manage-
ment graduating classes 1961-63.  The group consisted of 44 panelists volunteering
for detailed follow-up research beginning with interviews and various attitude
and value surveys.  Contact was maintained with each panelist and a major review
and resurvey was recently completed.

------------------------------------

*    This section has been developed with the help of Dr. Marshal Chatwin,
     Career Counceling, Monterey Penninsula College.

The five primary career anchors postulated by Schein are the following:

Anchor 1    Managerial competence - a basic need or satisfaction
            in building something, getting something accomplished,
            influencing people, planning and controlling resources,
            supervising others.

Anchor 2    Technical-functional competence - exercising ones
            technical knowledge and skill such as quantitative
            analysis, human relations and corporate planning
            rather than the managerial process.

Anchor 3    Security - a need to stabilize a career by linking
            it to a given organization.

Anchor 4    Creativity - a strong need to create something on
            ones own such as a new business, a new product, a
            new service.

Anchor 5    Autonomy and Independence - a primary, overriding
            concern for ones own freedom and autonomy.

On the basis of the aforementioned preliminary interviews with selected
Naval officers, Derr found that certain communities of Naval officers (e.g.
aviators, submariners) have predominant career anchors. Moreover, there may be
some career anchors peculiar to the Naval officer population generally which are
different from those discovered by Schein. A number of questions to Schein's
theory were also suggested, such as: do clusters of anchors, rather than one,
really determine behavior? Do these anchors change during adult life development?
If there is one predominant anchor, does the second-order one serve as a behav-
ioral back-up motivating force which functions when the first is being satisfied?
Are there any personal characteristics (e.g. personality, socio-economic origin)
which correlate with certain anchors?

C. <u>Career-Life Stages</u>. Hall and Nougaim (1968) identify some definite career stages corresponding to various ages as do Miller and Form (1951). Dalton and Thompson's recent work (in press) has revived the notion of career stages.

1. <u>Career Stages</u> - In a study of some 350 professional employees in large organizations, Dalton and Thompson probed what differentiates low performers from high performers.[*] From the data, it was shown that there is stong evidence that as individuals successfully move through their careers, they progress through a sequence of stages. High-performing individuals who continue to be ranked high by their supervisors throughout their careers tend to cope well with the differing demands of each of these various career stages, while individuals who do not cope as well with those specific demands tend to be ranked lower by their supervisor with respect to performance.

From Dalton and Thompson's research, four sequential career stages are evident. The first, Stage I, involves helping, learning and following the direction of others in the organization. The person in this stage is an "apprentice". Stage II includes a move from a subordinate to a colleague type of relationship and the demonstration of competence as an "individual contributor". In Stage III the individual broadens his or her focus and begins training and bringing others along. The person in this stage is called a "mentor". Finally, in Stage IV, the individual's focus shifts from some subpart of the organization to providing future direction for the organization as a whole or some major segment of it. This

---

[*] This section has been developed with the help of Mr. J. Bruce Prince, Department of Organizational Behavior, Brigham Young University.

- 7 -

person is called a "senior statesman".  Figure 1 below illustrates
these various career stages more completely.
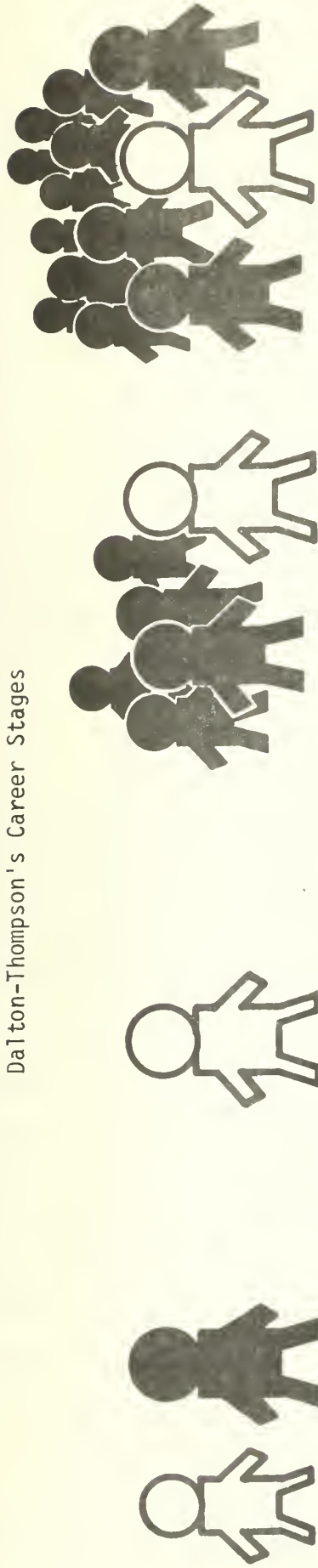
2.  Life Stages -                          In  recent years much attention
and interest has been generaged in both the popular and scientific
literature regarding the broad issue of adult life stage develop-
ment.  Sheehy's book (1976), presently a best seller, is an
indication of the high level of public interest in the topic.

The general thesis of this field of inquiry is that the various
developmental stages of children do not end at adolescence, but
continue on through the adult years.  There are stress points in
the adult years (stages) which adults experience and with which
they must deal.  To be sure, the exact timing and impact of these
stages differ considerably from person to person because they are
influenced by the individual's sex, occupation, marital status,
physical condition, psychological health, etc.  But according to
this theory, these adult life stages exist and they do not occur
entirely at random and ideosyncratically.

Briefly, there is an early adult transition or post-adolescence
stage in which a person begins to move into the adult world (ages
17-22).  In the next stage  one has to get established in that
adult world and experience it (ages 22-29).  A third stage is the
age thirty transition where ones adult life experiences and struc-
ture come into question.  Inner pressure to change and to become
ones own person becomes paramont (ages 29-32).  The fourth stage is
associated with settling down to career and personal/family concerns
(ages 32-42).  Then comes the mid-life transition (ages 42-50) in which
one must resolve critical issues of mortality and decline.  Finally,

FIGURE 1

Dal ton-Thompson's Career Stages



## Stage I

- Works under the supervision and direction of a more senior professional in the field
- Work is never entirely his own but is given assignments which are a portion of larger project or activity being overseen by senior professional
- Lacks experience & status in organization
- Is expected to willingly accept supervision and direction
- Is expected to do most of the detailed and routine work on a project
- Is expected to exercise "directed" creativity and initiative
- Learns to perform well under pressure and accomplish a task within the time budgeted

## Stage II

- Goes into depth in one problem or technical area
- Assumes responsibility for a definable portion of the project, process, or clients
- Works independently and produces significant results
- Develops credibility and a reputation
- Relies less on supervisor or mentor for answers, develops more of his own resources to solve problems
- Increases in confidence and ability

## Stage III

- Involved enough in his own work to make significant technical contributions but begins working in more than one area
- Greater breadth of technical skills and application of those skills
- Stimulates others through ideas and information
- Involved in developing people in one or more of the following ways:
  a. acts as an idea man for a small group
  b. serves as a mentor to younger professionals
  c. assumes a formal supervisory position
- Deals with the outside to benefit others in organizations, i.e., working out relationships with client organizations, developing new business, etc.

## Stage IV

- Influences future direction of organization through:
  a. original ideas, leading the organization into new areas of work
  b. organizational leadership and policy formation
  c. integrating the work of others to a significant end
- Influence gained on the basis of:
  a. past ability to assess environmental trends
  b. ability to deal with outside effectively
  c. ability to affect others inside the organization
- Has the ability to engage in wide and varied interactions:
  a. at all levels of the organization
  b. with individuals & groups outside the organization
- Involved in the development of future key people. A sponsor for promising people in other stages

- 9 -

© J. PETER GRAVES. 1976

\* Used by permission of Dalton, Thompson & Graves.

there is a mellowing or settling period in which one looks

back on life with either a sense of satisfaction or regret (ages

50 +).  The work of this last period is to prepare to wind down

ones life, to find and concentrate on what is most basic and

meaningful (e.g. family, friends, self).

Because the importance the mid-life crisis has for this study

it is necessary to describe it in some detail.[*]  Generally this

crisis is brought about by one or more of the following events:

Evidence of Physical Deterioration.  During these mid-life years

the evidence of physical aging becomes increasingly apparent.  The

appearance of gray hair and/or balding, the gaining of excess weight,

the lessening of physical vigor and agility, and the need for

reading glasses vividly impresses on the individual that we are

all subject to a terminal disease called aging.  The appearance

of these signs of physical deterioration and the depressing reality

that one is in the declining years is further underscored by the

death of friends and acquaintances who are in the same age bracket.

This realization that life is not endless and that one's life

is more than half over can have a profoundly sobering effect on an

individual.  Some may retreat into a state of depression while

others may carefully plot how best to use the years that remain.

Regardless of how one reacts to this, it is unlikely that once this

reality becomes manifest the individual will    view life or him-

self in quite the same way again.

------------------------

[*]    This section has been developed with the help of Dr. Richard C. Williams,
Graduate School of Education, UCLA.

Signs of Incomplete Occupational Success or Fulfillment. In the early
stages of one's career, it is not unusual for one to envision a future in which
one reaches the highest appropriate level of success (e.g. top management, im-
portant discoveries, extensive publications, high income). Somewhere in this
mid-life period many come face-to-fact with the fact that they will not likely
achieve those levels or success that had been taken for granted at an earlier
age, when everything seemed possible. They realize that for any number of reasons
there just are not enough years left to do all that they wanted to accomplish.
In addition, some individuals, both successful and unsuccessful, realize that
there is little personal fulfillment in their work. It may be viewed as boring,
trivial, or not challenging. Whatever the reason, some individuals question
seriously the continuation of their life's work.

To some, these insights regarding their life's work may cause only a slight
pause, and then the individual pushes ahead in spite of the recognized limita-
tions of doing so. Others, however, find this realization stunning and either
seek and find new occupations or continue in their present work with little
enthusiasm or commitment.

Changes in One's Personal Life Situation. During this period of time a
number of fundamental personal life situations may change significantly. For
example, marriages that have endured for 10-20 years are increasingly strained
as both partners undergo physical and psychological changes. The children may
be leaving the home for school or work and the family, as a unit, begins to
change unalterably, or the family may be stressed by a rapid rise in expenses
as the parents assume the financial responsibility for the children's college
tuition and the aging grandparents' living expenses.

Obviously there is considerable interaction among these three components;
they are inextricably locked together. Also, the combinations of these components

will vary from individual to individual. The evidence is quite clear that for many there is such a thing as a mid-life crisis and it can, and often does, have a profound effect upon those who are confronted with it.

One of the primary reasons for introducing this life-career stage subject into the study is to test the extent to which adult life stages and organizational career stages are interdependent, conflicting or mutually reinforcable. It is reasonable to assume, for example, that the demands of the organization and the developmental needs of the individual might coincide and conflict around Dalton and Thompson's various career stages. In some occupations the apprenticeship (Stage I) might also be occuring during the period when a person is seeking identity and getting into the adult world. One of the best ways to accomplish this is by working closely with seniors and modeling their behavior. There should be little conflict.

At early Stage II, where independence and competence are at issue, a corresponding life development stage may be that of transition and self-assertion. However, in some occupations, late State II (during the 30's) might require hard work and long hours to demonstrate to the employer that one is indeed a competent individual performer. A conflict may arise when a person cannot find the time and energy to "root and extend" (Sheehy, 1976) or to find the extra time necessary to personally find ones total self. Oftimes, for example, this is a period of beginning to discover the "soft" or non-achievement side and to integrate it with the hard-driving self of the work/identity period. This is often a period of requiring more time with family, friends and working at hobbies, and frustration is bound to occur if organizational demands force one to postpone such desires in order to advance in the career.

Stage III in the career calls for achievement by working with others or becoming a mentor. It usually occurs during the early mid-life crisis period.

The building of relationships with junior apprentices can fulfill a personal developmental need to remain useful and influential. However, conflicts between life-career stages can again occur. The enterprise demands intensive managerial performance at that point in the career,since one has an opportunity to become a senior executive if he does well,but the person also requires much time and energy to work through his own personal problems at that important crisis period.

During Stage IV there is more congruence. The organization wants wisdom, policy making and integration. The individual is often at the end of his mid-life crisis and ready to give the same. He is becoming more settled, more integrated, more apt to look at life generally and broadly and often ready to end his career making one last enduring contribution.

It is, therefore, deduced from theory that the particular life stage of an individual can impact upon his career performance and decision-making. Moreover, the demands of the organization, especially at career Stages II and III, might seriously conflict with some life stage developments. More awareness of this phenomenon and better career-life planning could lead to a more productive manager.

This, of course, assumes that he follows a linear definition of career success (which is the assumption of the Dalton-Thompson work). The tensions between the career and adult life development may be quite different for those who follow a spiral career pattern or for the transcient, for example. Moreover, some may have arrived at Stage IV early and be ready to begin a second career commensurate with their mid-life growth tensions.

D. Family-Career Concerns. Related to the above, it is indisputable that the spouse and children play a significant and influential role in the worker's career satisfaction, productivity and patterns (Grace, Steiner, Halater, 1976). For many single and married careerists, the role of parents, relatives and even very close friends also impacts on the career (Kanter, 1977). The definition of "the family" as a basic nuclear entity is also changing. Nevertheless, a family

crisis, however it is defined, can have a profound impact on all aspects of a person's life, even though those who are most personal/family oriented (as opposed to being career oriented) might be expected to experience extra-work activities more fully than the others (Hall, 1971; Bailyn, 1970).

Family matters are of particular interest in studying Naval officer careers. Much has been written about the family difficulties associated with physical separation during active duty tours for military personnel. (McCubbin et.al., 1974, 1976). Derr's preliminary interviews with officer-students (mentioned above) at the Naval Postgraduate School indicate that this is an important area of concern associated with career retention,satisfaction and productivity.

Therefore, it follows that any comprehensive study of the individual side of the career must include an examination of the interelationship and conflicts between family expectations and organizational (career) demands. Obtaining per-ceptions from the wife, given that those studied are married men, is also a way to further validate research findings.

E. Career Politics. Organizational power has been defined as "A's ability to modify the behavior of B in A's desired direction without altering his or her own behavior." (Schein, 1977). Or, as Korda (1976) says, "Power is the ability to bring about our desires." Organizational politics, therefore, are the intentions, means and actions used by an individual or group to gain power.

Career politics are the intentions, means and actions used by an individual in an organization to attain, (given his career anchor, his career-life stages and his family concerns) his definition of career success. Since politics is an attempt to get ones wishes and since many desires are mutually incompatible given scarce resources, career success will probably be a function of doing the best one can given the situation. Nevertheless, having desirable career opportunities will often depend, in large measure, on ones fortunes and skill in the political arena (Weber, 1975).

Attribution theory has been found to be useful in understanding organizational politics (Schein, 1977; Pfeffer, 1977). It says that regardless of ones real intentions, or agendas, it is important in organizations not to be seen as self-seeking or having intentions which basically deviate from those prescribed by the enterprise. Being seen as "selfish" is an anti-organizational image and not likely to be tolerated, certainly not to be rewarded, by most employers. Being viewed as "political" or "opportunistic" also creates a negative image, the opposite from being perceived as loyal, interested and committed. Thus, an objective of anyone involved in organizational politics is to give the impression of being an "organizational person" and of finding ways to make it appear as though one is personally committed to organizational objectives.

If ones real intentions do, in fact, correspond to organizational requirements, one may use overt means to accomplish his objectives. Being open and even flaunting accomplishments in competition with others will be career -enhancing because the organization is likely to reward attitudes and performance corresponding to its career incentives and plans. If, however, ones intentions are not congruent with his employer's expectations, one is forced to use covert means or be secretive in accomplishing his career objectives. One of the most preferred strategies is to make it appear as if one is working hard to achieve a prescribed career goal but, in reality, to actively use any advantage this may bring (e.g. inside information, more salary) to secretly pursue ones own agenda.

If a person is caught pursuing his own career interests, often at the expense of the organization, he is likely to be punished or at least to fall into disfavor and tarnish his image. Not only is he likely to be perceived as subversive, disloyal and costly (in terms of the time, experiences, political and emotional investments involved in getting him to conform to company policy) but also rejecting. Such a person could be judged to have ignored or redefined the career

reward system those in power may have worked to attain.  In a sense, such a person may be perceived as saying that he does not value the career pattern followed by his more experienced colleagues.

An attempt will be made in the study to ascertain Naval officers' real career agendas (including the active preparation for a second career) as a way of understanding and predicting career behavior.  Derr's aforementioned preliminary investigation indicates that political sponsors, job assignments (billets) and job ratings are perceived by Naval officer's as critical to their career success.

F.  Summary of the Theory.  The career is to be understood from an individual careerist's perspective.  What causes him to think and act in certain ways, usually within an organizational context, in order to pursue his career?  Why does he sometimes act at cross-purposes with the organization?  Why does he sometimes fail to respond to its career incentives?  Why does he leave the enterprise or retire on-the-job?  Why do some become examplary career models?

The theory is based on five key concepts which are important to understanding the "personal" aspects of the career.  Following is a summary of those five theoretical/conceptual frameworks:

There are several definitions of career success.  Building on Driver's model, there are at least five different patterns.  It is important to ascertain which concept seems most prevalent and to attempt to elaborate under which conditions each appears organizationally appropriate.  In this sense, diverse individuals and their organizations may strike good career matches.  Moreover, knowing the definitions of a successful career will help researchers better understand the various intents and underlying motives of career behavior.  It is of special interest to better understand the various Naval officer definitions of career success and which of these is preferred.

Career anchors are the basic values, motives needs and talents which keep a person focused on a specific career pattern. It is important to attempt to understand these as basic factors in promoting retention, satisfaction and productivity. In the case of Naval officers, does one Navy community attract persons with certain anchors or, by design, should they,given the nature of their probable career opportunities? Could some career path be modified to accomodate the various anchor profiles without, for example, assuming a managerial/command orientation in every instance?

The underlying issue behind studying the career-life stage dimensions of work is the extent to which these stages are congruent and/or conflict at various points and the concomitant impact of their incongruency on retention, satisfaction and productivity. This will be an especially important area of exploration for those Naval officers who pursue a linear definition of career success.

Closely related to the above is the area of family-career concerns. This is an effort to examine the role and influence of the spouse and children on the Naval officer's career. Conversly, what is the perceived impact of the career on family affairs and what are the consequences of these effects?

Finally, it is postulated that the opportunities available to individuals to achieve their desirous career states are, in large measure, a function of their fortune and skill in the area of career politics. How they understand the politics, their fortuitous circumstance, their abilities to behave politically, and their achievements of some of what was desired--all of these factors are critical for understanding who will remain at the career, who will be partially fulfilled and who will continue to work hard to gain mutual benefits. Knowing how and why there was political failure might provide insight on career changes and unproductive behaviors.

IV.  RESEARCH INSTRUMENTS

The above theoretical premises are designed to provide insight on the "personal" perspective of Naval officer careers which enhance and inhibit retention, satisfaction and productivity.  Following are the research instruments per category?*

A.  Career Concept

(1) Interview Questions

   a.   What is your own definition of a successful career?
        That is, what will determine for you at the end of
        your career whether or not it has been successful?

   b.   As you are aware, you will retire one day.  How do
        you see your second or non-Navy career?  Do you
        know yet what you will do?  Have you done much plan-
        ing for it?  Do you se retirement as a necessary
        evil or an exciting opportunity?

(2) Questionnaire Item

   INSTRUCTIONS:  Described below are several different con-
   cepts illustrating career behavior.  Please rank order
   them according to what you consider the most successful
   career pattern (generally, whether or not this matches your
   own career pattern). Mark them 1 to 5 with (1) rep-
   resenting the concept that most represents your idea of the
   ideal successful career and  (5)  the one which least cor-
   responds to your ideal successful career concept.

   A career change here refers to switching professions or the
   nature of the work itself (e.g. becoming a salesman when you
   were an architect) as opposed to changing jobs (e.g. driving
   a truck for a different project or doing the same thing for
   a new company).

*    The instruments have been appropriately modified for studying the
     Navy wives subpopulation.

1.  a person who makes frequent career changes in order to remain mobile, independent, free and uncommitted

    _____

2.  a person who aggressively seeks to ascend up the hierarchy and increase his rank and pay

    _____

3.  a person who loyally, faithfully and tenaciously pursues a life-long career (whether or not he advances up the hierarchy)

    _____

4.  a person who is growth-oriented and periodically seeks new adventures and career changes corresponding to his new life stage

    _____

5.  a person who retires from his first career early, with some financial security, and then pursues a second career corresponding to his new life stage

    _____

B.  Career Anchors

    (1) Interview Questions

        a.  What were your ambitions or long-range goals when you started your career?  Have they changed?  When? Why?

        b.  What kinds of billets do you prefer most (e.g. sea, shore and specific types of work situations)?

        c.  What are things you look for in a good billet, things that are important to you?

        d.  As you look back over your career thus far, identify some times you have especially enjoyed.   What about those times did you enjoy?

        e.  Identify some times you did not especially enjoy.  What about them did you not enjoy?

        f.  Have you ever pushed hard to resist or change a particular assignment?  Why?

    (2) Questionnaire Items

        a.  Career Values Form

## Career Values Form

Listed below are 10 values related to life/career planning. We would like you to compare each value with the others using the comparison table below.

For example, look at value #1, (High income-making lots of money) and compare it with #2, (Independence-being your own boss). If #1 is more important to you than #2, then circle the $\frac{①}{2}$ . However, if being your own boss is more important to you than making lots of money, then circle the 2 like this: $\frac{1}{②}$ . Move on to the next two numbers $\frac{1}{3}$ . Compare value number 1 with value number 3 (helping others), then circle number 1 like this: $\frac{①}{3}$ . Or, if value number 3 is more important to you than number one, circle value number 3 like this $\frac{1}{③}$ . Continue through the rows of numbers, comparing each pair of numbers, circling the number of the more important value each time.

VALUES                                           COMPARISON TABLE

| 1. High Income-<br>Making lots of money | $\frac{1}{2}$ | $\frac{1}{3}$ | $\frac{1}{4}$ | $\frac{1}{5}$ | $\frac{1}{6}$ | $\frac{1}{7}$ | $\frac{1}{8}$ | $\frac{1}{9}$ | $\frac{1}{10}$ |
|---|---|---|---|---|---|---|---|---|---|
| 2. Independence-<br>Being your own boss | | $\frac{2}{3}$ | $\frac{2}{4}$ | $\frac{2}{5}$ | $\frac{2}{6}$ | $\frac{2}{7}$ | $\frac{2}{8}$ | $\frac{2}{9}$ | $\frac{2}{10}$ |
| 3. Helping others | | | $\frac{3}{4}$ | $\frac{3}{5}$ | $\frac{3}{6}$ | $\frac{3}{7}$ | $\frac{3}{8}$ | $\frac{3}{9}$ | $\frac{3}{10}$ |
| 4. Career & job security | | | | $\frac{4}{5}$ | $\frac{4}{6}$ | $\frac{4}{7}$ | $\frac{4}{8}$ | $\frac{4}{9}$ | $\frac{4}{10}$ |
| 5. Managing others and<br>administering | | | | | $\frac{5}{6}$ | $\frac{5}{7}$ | $\frac{5}{8}$ | $\frac{5}{9}$ | $\frac{5}{10}$ |
| 6. Creating or inventing new<br>things or ideas, innovation | | | | | | $\frac{6}{7}$ | $\frac{6}{8}$ | $\frac{6}{9}$ | $\frac{6}{10}$ |
| 7. Having a job with lots<br>of time off | | | | | | | $\frac{7}{8}$ | $\frac{7}{9}$ | $\frac{7}{10}$ |
| 8. Retiring early and starting<br>a second career | | | | | | | | $\frac{8}{9}$ | $\frac{8}{10}$ |
| 9. Having a job that has high<br>social importance | | | | | | | | | $\frac{9}{10}$ |
| 10. Becoming technically outstanding<br>& expert in your field or job specialty | | | | | | | | | |

b.  Values Clarification

Please circle from the following list
the five job wants most important to
you.  Then rank order those circled from most
(1) to least (5) important.

| | | | |
|---|---|---|---|
| challenge | ___ | leadership | ___ |
| variety | ___ | education/training | ___ |
| responsibility | | advancement | ___ |
| power | ___ | fun work | ___ |
| expertise | ___ | independence | ___ |
| autonomy | ___ | travel | ___ |
| status | ___ | early retirement | ___ |
| security | ___ | esthetics | ___ |
| innovation | ___ | low pressure | ___ |
| | | other (list) | ___ |

Now please circle from the following list
the five job-related wants most important
to you.  Then rank-order them from most
(1) to least (5) important.

| | | | |
|---|---|---|---|
| type of business/ activity | ___ | friends at work | ___ |
| size of organization | ___ | rural community | ___ |
| hours worked | ___ | suburban community | ___ |
| free time | ___ | metropolitan | ___ |
| benefits | ___ | cost of living | ___ |
| geographic location | ___ | commuting distance | ___ |
| physical facilities | ___ | attitudes of management | ___ |
| proximity to extended family | ___ | | |

C.  Career-Life Stage

   (1)  Interview Questions

      (a)  Please talk about your childhood as it relates
           to you having chosen this career.  What were
           your early interests in high school?  What was
           your major or concentration in college?  Why did
           you choose that area?  How did you feel about it?

      (b)  Which people, if any, played key roles in influ-
           encing you to choose a military career?

      (c)  Why did you choose a military career?  Initially?
           At the various re-enlistment stages?

      (d)  How long do you plan to remain?  What rank would
           you like to attain?

      (e)  Do you like the life of being a career military
           officer?  Why?  Why not?

      (f)  Is there anything about this stage of your life
           which does not correspons well with your career
           (e.g. being away at sea and small children)?

      (g)  Do you think much about not making your career
           goals?  If you do not reach them,how are you
           likely to handle this?  Will you feel unfulfilled?

   (2)  Questionnaire Items

      (a)  Career-Life Satisfaction

Career-Life Satisfaction

INSTRUCTIONS:  Below is a list of pairs of words which can be
used to describe how people feel about their career as it has
thus far unfolded.  Please mark the space between the two words
which comes closest to your feelings.  The further you mark a
space in either direction means that your feelings about your
career are more like that word.  Remember only one mark per line.

| | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|
| Secure | ___ | ___ | ___ | ___ | ___ | Threatened |
| Bored | ___ | ___ | ___ | ___ | ___ | Interested |
| Tense | ___ | ___ | ___ | ___ | ___ | Relaxed |
| Challenged | ___ | ___ | ___ | ___ | ___ | Unfulfilled |
| Intensive | ___ | ___ | ___ | ___ | ___ | Nonchalant |
| Going Nowhere | ___ | ___ | ___ | ___ | ___ | On The Way Up |
| Trapped | ___ | ___ | ___ | ___ | ___ | Free |
| Pleased | ___ | ___ | ___ | ___ | ___ | Disappointed |
| Incompetent | ___ | ___ | ___ | ___ | ___ | Competent |
| Competitive | ___ | ___ | ___ | ___ | ___ | Non-Competitive |
| Self-Satisfied | ___ | ___ | ___ | ___ | ___ | Self-Critical |
| Successful | ___ | ___ | ___ | ___ | ___ | Unsuccessful |
| Hopeful | ___ | ___ | ___ | ___ | ___ | Resigned |

Now complete the same exercise.  This time concentrate
on how you feel about your life at this point in time.
In general, how are you feeling at this stage in your life.
Put one mark per line.

| | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|
| Secure | ___ | ___ | ___ | ___ | ___ | Threatened |
| Bored | ___ | ___ | ___ | ___ | ___ | Interested |
| Tense | ___ | ___ | ___ | ___ | ___ | Relaxed |
| Challenged | ___ | ___ | ___ | ___ | ___ | Unfulfilled |
| Intensive | ___ | ___ | ___ | ___ | ___ | Nonchalant |
| Going Nowhere | ___ | ___ | ___ | ___ | ___ | On The Way Up |
| Trapped | ___ | ___ | ___ | ___ | ___ | Free |
| Pleased | ___ | ___ | ___ | ___ | ___ | Disappointed |
| Incompetent | ___ | ___ | ___ | ___ | ___ | Competent |
| Competitive | ___ | ___ | ___ | ___ | ___ | Non-Competitive |
| Self-Satisfied | ___ | ___ | ___ | ___ | ___ | Self-Critical |
| Successful | ___ | ___ | ___ | ___ | ___ | Unsuccessful |
| Hopeful | ___ | ___ | ___ | ___ | ___ | Resigned |

b. Life Stage-Career Concerns

INSTRUCTIONS: Following are issues some people have identified
as major concerns during their middle years. Please read and
rate them according to their importance to you at this time in
your life. Circle the number which best indicates how you
personally feel about the issue.

| | Extremely Important | Important | Somewhat of An Issue | So-So | Not At All Important |
|---|---|---|---|---|---|
| 1. acheiving financial security after retirement | 1 | 2 | 3 | 4 | 5 |
| 2. achieving my objectives for a military career | 1 | 2 | 3 | 4 | 5 |
| 3. obtaining education & training opportunities | 1 | 2 | 3 | 4 | 5 |
| 4. finding and keeping good "sponsors" or "mentors" (more senior officers who can help you get ahead in your military career) | 1 | 2 | 3 | 4 | 5 |
| 5. preparing for my second career after retirement | 1 | 2 | 3 | 4 | 5 |
| 6. getting good billets in terms of their helping me to get promoted | 1 | 2 | 3 | 4 | 5 |
| 7. getting good ratings on my fitness report | 1 | 2 | 3 | 4 | 5 |
| 8. having good feelings of integrity about myself | 1 | 2 | 3 | 4 | 5 |
| 9. becoming aware of & accepting signs of aging (e.g. less physical vigor, gray hair, less agility). | 1 | 2 | 3 | 4 | 5 |

10. feeling that I may
    not achieve my mil-
    itary career goals       1           2           3           4           5

11. being worried about
    my sexual perform-
    ance                     1           2           3           4           5

12. feeling more burd-
    ened economically
    by increased finan-
    cial responsibilities    1           2           3           4           5

13. desiring more socio-
    emotional closeness
    with family & friends    1           2           3           4           5

14. feeling that the de-
    mands of my current
    career prevent me
    from fulfilling my
    emotional needs          1           2           3           4           5

15. being concerned gen-
    erally about the
    current direction of
    change in my spouse
    (e.g. she now wants to
    pursue a career, she
    is pushing her inde-
    pendence, she is more
    permiscuous)             1           2           3           4           5

16. being concerned about
    the direction of
    change in one or more
    of my chilcren (e.g.
    they are pursuing courses
    of action I don't like,
    don't agree with, or
    think will bring them
    harm )                   1           2           3           4           5

17. being concerned about
    the direction of change
    in society               1           2           3           4           5

D.  Family Concerns

    (1)  Interview Questions

        a.  Are you experiencing any changes in your family life style
           or values which might conflict with your Navy career
           (e.g. questioning working such long hours, having
           stronger desires to be at home more, feeling unful-
           filled).  Explain.

        b.  Is your spouse experiencing any changes which could
           affect your career?

        c.  In what ways might the organization fail to meet your
           changing personal/family needs?  How will this impact
           on your desire to actively pursue your career?

    (2)  Questionnaire Items

        a.  Marriage and the Career

           INSTRUCTIONS:  Marriage can have a profound effect on the
           degree of happiness or unhappiness a person experiences in
           his life.  The next questions are designed to measure marital
           adjustment.

           1. Circle the <u>dot</u> on the scale line below which best describes
              the degree of happiness, everything considered, of your
              present marriage.  The middle point "happy" represents the
              degree of happiness which most people get from marriage,
              and the scale gradually ranges on one side to those few
              that are very unhappy and on the other, to those few who
              experience extreme happiness.

.       .       .       .       .       .       .
_____

Very                                            Perfectly
Unhappy                   Happy                       Happy

    2.  How much of your marital unhappiness do you estimate is
        related to your career?  Please check one of the
        following:

                80%  or more       \_\_\_\_

                60%  or more       \_\_\_\_

                40%  or more       \_\_\_\_

                20%  or more       \_\_\_\_

                Less than 20%   \_\_\_\_

    3.  On a scale of 1-5, how influential is your spouse in
        helping you make career decisions?  Circle one:

•         •         •         •         •
_____

Very                                              Not al all
Influential                                    Influential

E.  Career Politics

   (1)  Interview Questions

      a.  Do you have a game plan for advancing your career
          according to your own definition of career success?
          Would you please share some of it with me so that I
          can better understand how people in your community
          try to influence the direction of their future career.

      b.  Is it important or helpful to have "sponsors" (more
          senior officers who try to exert influence in your
          behalf) and what role do they play?

      c.  In this regard do you think that getting on the good
          side of your current CO is most important, or is it
          critical to get as your sponsor a long term mentor who
          will look out for you no matter what?  Or, is it
          important to have both kinds of sponsors?

      d.  What is a good strategy for relating to peers or con-
          temporaries and what role do they play in a person's
          career?

      e.  Can your spouse play a critical function?  If so, how?

      f.  What will be the most important combination of factors
          in advancing your military career (e.g. politics,
          billets, fit reps.)?

IV. BIBLIOGRAPHY

1. N. M. Abrahams and I. Neuman,"The Assessment of Career Motivation
   Among NROTC Applicants with the Strong Vocational Interest Blank,"
   55 R 72-9, (San Diego:  NPTRL, 1971).

2. Clayton Alderfer, "Comparison of Questionnaire Responses With and Without
   Preceeding Interviews," Journal of Applied Psychology, vol. 52, 1968,
   pp. 335-340.

3. Lotte Bailyn, "Career and Family Orientations of Husbands and Wives in
   Relation to Marital Happiness," Human Relations,  vol. 23, 1970,
   pp. 97-113.

4. James E. Birren, Handout of Aging and the Individual, (Chicago:  University
   of Chicago Press, 1959).

5. Richard Nelson Bolles, What Color is Your Parachute?  (Ten-Speed Press, 1973).

6. Gene W.  Dalton, Paul H. Thompson and Raymond Price, "Career Stages:  A
   Model of Professional Careers in Organizations," a paper presented at
   the Western Academy of Management Meeting, March 1977, to be published
   in Organizational Dynamics, (1977 or 1978).

7. Gene W. Dalton, Paul H. Thompson and Jan Wilson, "Stages in Engineering
   Careers," to be published in Jay Paap and Edgar H. Schein, eds., New
   Directions in Human Resource Management, (Prentice Hall, in press).

8. Michael J. Driver, "Career Concepts:  A New Approach to Career Research,"
   to appear in Paap and Schein, Ibid.

9. Richard S. Elster, Assistant to Chief of Naval Personnel, in a speech
   to the Human Research Management Research Conference, Naval Post-
   graduate School, May, 1976.

10. Erik  Erickson,"Identity and Life Cycle:  Growth and Crisis and the
    Healthy Personality", Psychological Issues,  Vol. 1(1), Monograph 1,
    1959.

11. A.S. Glickman, B.E. Goodstadt, A.K. Korman, and A.P. Romanczuk, Navy
    Career Motivation Programs in an All-volunteer Condition:     A
    Cognitive Map of Career Motivation. (Technical Report.  American
    Institutes for Research (Washington Office)), March, 1973.

12. Roger Gould, "The Phases of Adult Life:  A Study in Developmental Psychol-
    ogy", The American Journal of Psychiatry, Vol. 129(5), November, 1972.

13. Gloria L. Grace, Mary B. Steiner, Harold A. Holoter, "Navy Career Coun-
    seling Research:  Navy Wives Study," Office of Naval Research Report,
    TM-5031-007-00, September, 1976.

14. Bernard Haldane, Career Satisfaction and Success:  A Guide to Job Freedom,
    (Amacom, 1974).

15. Douglas T. Hall, Careers In Organizations,  (Pacific Palisades, Ca.:
    Goodyear Publishing Co., 1976).

16. Douglas T. Hall and B. Schneider, <u>Organizational Climates and Careers:</u> <u>The Work Lives of Priests</u>, (New York: Seminar Press, 1973).

17. Douglas T. Hall, "A Theoretical Model of Career Subidentity Development in Organizational Settings," <u>Organizational Behavior and Human Performance</u>, Vol. 6, 1971, pp. 50-76.

18. Douglas T. Hall and Khalil Naugaim, "An Examination of Maslow's Need Hierarchy in an Organizational Setting," <u>Organizational Behavior and Human Performance,</u> Vol. 3, 1968, pp. 12-35.

19. Abram J. Jaffe, "The Middle Years: Neither Too Young or Too Old", <u>Industrial Gerentology</u>, (Washington, D.C.: special issue, MCDA, 1971).

20. Carl Jung, "The Stages of Life". (1931), in J. Campbell, ed., <u>The Portable Jung</u>, (New York: Viking Press, 1971).

21. Rosabeth Moss Kanter, <u>Work and Family in the United States: A Critical Review and Agenda for Research and Policy</u>, (New York: Russell Sage Foundation, 1977).

22. Michael Korda, <u>Power: How to Get It, How to Use It</u>, (New York: Random House, 1975).

23. W. E. Lassiter and J.H. Proctor, <u>Naval Officer Retention In An All Volunteer Force Environment: Job Proficiency and Organizational Climate</u>, (Bethesda.Maryland: Data Solutions Corp., December 1973

24. Daniel Levinson, <u>A Psycho-Social Study of the Male Mid-Life Decade,</u> unpublished doctoral dissertation, Yale University, New Haven, Conn., 1972.

25. Daniel Levinson, C. Darrow, E. Klein, M. Levinson, and B. McKee, "The Psychological Development of Men in Early Adulthood and the Mid-life Transition," in Hicks, Thomas and Roff (eds.), <u>Life History Research in Psychopathylogy</u>, (Minneapolis: University of Minnesota Press, 1974).

26. Daniel Levinson, C. Darrow, E. Klein, M. Levinson, and B. McKee, "Periods in Adult Development of Men: Age 18 to 45", <u>Counseling Psychologist</u>, Vol. 6(1), 1976, pp. 21-25.

27. Daniel Levinson, "The Mid-Life Transition: A Period in Adult Psycho-social Development", <u>Psychiatry</u>, May, 1977.

28. K. Lang, "Changing Career Structure in the Military," <u>Administrative Science Quarterly</u>, 17, December, 1972.

29. Hamilton I. McCubbin et.al., <u>Family Separation and Reunion: Families of Prisoners of War and Servicemen Missing in Action</u> (San Diego: Naval Health Research Center, 1974).

30. Hamilton I. McCubbin, Barbara B. Dahl and Edna J. Hunter, <u>Families in the Military System</u>, (Sage, 1976).

31. D. C. Miller and William H. Form, <u>Industrial Sociology</u>, (New York: Harper, 1951).

32. Bernice L. Newgarten, <u>Middle Age and Aging</u>, (Chicago: University of Chicago Press, 1970).

33. Bernice Neugarten, "Adult Personality:  Toward a Psychology of the Life Cycle" In B. Neugarten (ed.)  Middle Age and Aging, (University of Chicago: Chicago Press, 1968).

34. Bernice Neugarten, and N. Datan, "Sociological Perspectives on the Life Cycle", and in P. Balts and Schail (eds.), Life-Span Developmental Psychology:  Personality and Socialization, (New York Academic Press, 1973).

35. S.H. Osipow, Theories of Career Development, (New York: Appleton-Century-Crofts, 1973).

36. J. Pfeffer, "Power and Resources Allocation," in B. Staw and G. Salancik, eds., New Directions in Organizational Behavior, (Chicago: St. Clair, 1977), pp. 235-265.

37. R. Rapport and R.N. Rappoport, "The Dual Career Family:  A Variant Pattern and Social Change," Human Relations, Vol. 22, 1969, pp. 3-30.

38. D. W. Robertson, "R&D Programs in Support of Career Stability of Naval Officer and Enlisted Personnel,"  NPRDC Working Paper, September, 1975.

39. Kenn Rogers, Managers, Personality and Performance, (London:  Tavistock Publishers, 1963).

40. Edgar H. Schein, "The Individual, The Organization, The Career," Journal of Applied Behavioral Science,  Vol. 7, 1971, pp. 401-426.

41. Edgar H. Schein, "Career Anchors and Career Paths:  A Panel Study of Management School Graduates," Sloan School Working Paper 707-74, Massachusetts Institue of Technology, May, 1974.

42. Edgar H. Schein, "The Stability of Values in the First Ten Years of the Career," Office of Naval Research Report, N00014-67-A-0204-0073.

43. Edgar H. Schein, "Career Anchors Hold Executives to Their Career Paths," Personnel,  Vol. 52, 1975, pp. 11-24.

44. Virginia E. Schein, "Individual Power and Political Behaviors in Organizations:  An Inadequately Explored Reality," The Academy of Management Review,  Vol. 2, No. 1, 1977, pp. 64-72.

45. Gail Sheely, Passages: Predictable Crises of Adult Life,  (New York:  Dutton, 1976).

46. P. M. Shepherd, An Analysis of the Availability and Sources of U.S. Navy Officer Career Planning Information,  Masters Thesis, Naval Postgraduate School, April, 1974.

47. D. E. Super, The Psychology of Careers,  (New York:  Harper & Row, 1957).

48. George Vaillant and Charles McArthur, "Natural History of Male Psychological Health:  The Adult Life Cycle from 18-50", Seminars in Psychiatry, Vol. 4(4), November, 1972, pp. 415-427.

49. John Van Maanen and Edgar H. Schein, "Career Development", in J. Richard Hackman and J. Lloyd Suttle (eds.) Improving Life at Work, (Pacific Palisades, Ca.: Goodyear Publishing, 1977), Chapter 2.

50. Ross A. Webber, "The Three Dilemmas of Career Growth," MBA, May 1975.

51. H. L. Wilensky, "Orderly Careers and Social Participation," American Sociological Review, 1963, 26, 521-539.

DISTRIBUTION LIST

LIST 1

MANDATORY

Office of Naval Research  (3)
(Code 452)
800 N. Quincy Street
Arlington, Virginia 22217

Director  (6)
U.S. Naval Research Laboratory
Washington, D.C. 20390
ATTN:  Technical Information
       Center

Defense Documentation Center  (12)
Building 5
Cameron Station
Alexandria, Virginia  22314

Library, Code 2029  (6)
U.S. Naval Research Laboratory
Washington, D.C. 20390

Science & Technology Division
Library of Congress
Washington, D.C. 20540

--------------------------------------------------------------------------------

LIST 2

ONR FIELD

Director
ONR Branch Office
495 Summer St.
Boston, MA 02210

Psychologist
ONR Branch Office
495 Summer St.
Boston, MA 02210

Director
ONR Branch Office
536 S. Clark St.
Chicago, IL 60605

Director
ONR Branch Office
1030 E. Green St.
Pasadena, CA 91106

Psychologist
ONR Branch Office
1030 E. Green St.
Pasadena, CA 91106

Research Psychologist
ONR Branch Office
536 S. Clark St.
Chicago, IL 60605

PRINCIPAL INVESTIGATORS

Dr. Earl A. Alluisi
Old Dominion University Res. Foundation
Norfolk, Virginia 23508

Dr. Judith Daly
Decisions & Designs, Inc.
Suite 100
8400 Westpark Dr.
McLean, Virginia 22101

Dr. James A. Bayton
Department of Psychology
Howard University
Washington, D. C. 20001

Dr. H. Russell Bernard
Dept. of Sociology & Anthropology
West Virginia University
Morgantown, West Virginia 26506

Dr. Arthur Blaiwes
Naval Training Equipment Center
Orlando, Florida 32813

Dr. Milton R. Blood
School of Business
Georgia Institute of Technology
Atlanta, Georgia 30332

Dr. Davis B. Bobrow
University of Maryland
Department of Government & Politics
College Park, Maryland 20742

Dr. David G. Bowers
Institute for Social Research
University of Michigan
Ann Arbor, Michigan 48106

Dr. John J. Collins
Vice President
Essex Corporation
6305 Caminito Estrellado
San Diego, California 92120

Dr. Harry R. Day
University City Science Center
Center for Social Development
3624 Science Center
Philadelphia, Pennsylvania 19104

Dr. C. Brooklyn Derr   (50)
Associate Professor, Code 54
Naval Post-Graduate School
Monterey, California 93940

Dr. George T. Duncan
Carnegie-Mellon University
5000 Forbes Ave.
Pittsburgh, Pennsylvania 15213

Dr. Samuel L. Gaertner
Department of Psychology
University of Delaware
220 Wolf Hall
Newark, Delaware 19711

Dr. William E. Gaymon
Suite 200
1055 Thomas Jefferson St., NW
Washington, D. C. 20007

Dr. Paul S. Goodman
Graduate School of Industrial Admin.
Carnegie-Mellon University
Pittsburgh, Pennsylvania 15213

Dr. J. Richard Hackman
Administrative Sciences
Yale University
56 Hillhouse Ave.
New Haven, Connecticut 06520

Dr. Leo A. Hazlewood
CACI, Inc.
1815 Fort Myer Dr.
Arlington, Virginia 22209

Dr. Edwin Hollander
Department of Psychology
State University of New York
  at Buffalo
4230 Ridge Lea Rd.
Buffalo, New York 14226

Mr. Daniel F. Huck
General Research Corp.
Westgate Research Park
McLean, Virginia 22101

Dr. Charles L. Hulin
Department of Psychology
University of Illinois
Champaign, Illinois 61820

Dr. Rudi Klauss
Syracuse University
Public Administration Dept.
Maxwell School
Syracuse, New York 13210

Dr. Edward E. Lawler
Battelle Human Affairs Research Centers
4000 N.E. 41st St.
P. O. Box 5395
Seattle, Washington 98105

Dr. Arie Y. Lewin
Duke University
Duke Station
Durham, North Carolina 27706

Dr. Morgan W. McCall, Jr.
Center for Creative Leadership
5000 Laurinda Dr.
P. O. Box P-1
Greensboro, North Carolina 27402

Dr. Terence R. Mitchell
School of Business Administration
University of Washington
Seattle, Washington 98195

Dr. William H. Mobley
College of Business Administration
University of South Carolina
Columbia, South Carolina 29208

Dr. Thomas D. Morris
The Brookings Institution
1775 Massachusetts Ave., NW
Washington, D. C. 20036

Dr. James P. Murphy
National Analysts
A Division of Booz-Allen & Hamilton,
400 Market St.
Philadelphia, Pennsylvania 19106

Dr. Peter G. Nordlie
Human Sciences Research, Inc.
7710 Old Springhouse Rd.
McLean, Virginia 22101

Dr. Herbert R. Northrup
Industrial Research Unit
University of Pennsylvania
Philadelphia, Pennsylvania 19174

Dr. A. F. K. Organski
3068 Institute for Social Research
University of Michigan
Ann Arbor, Michigan 48104

Dr. Paul Pedersen
Society for Intercultural Education,
  Training and Research
107 MIB, University of Pittsburgh
Pittsburgh, Pennsylvania 15260

Dr. Manuel Ramirez
Systems and Evaluations
232 Swanton Blvd.
Santa Cruz, California 95060

Dr. Irwin Sarason
Department of Psychology
University of Washington
Seattle, Washington 98195

Dr. S. B. Sells
Texas Christian University
Fort Worth, Texas 76129

Dr. H. Wallace Sinaiko
Program Director
Manpower Research & Advisory Services
Smithsonian Institution
801 N. Pitt St. - Suite 120
Alexandria, Virginia 22314

Mrs. Alice I. Snyder
Mental Health Clinic
Naval Regional Medical Center
Pearl Harbor
FPO San Francisco 96610

Dr. Richard Steers
Graduate School of Management & Business
University of Oregon
Eugene, Oregon 97403

Dr. Victor H. Vroom
School of Organizational Management
Yale University
56 Hillhouse Ave.
New Haven, Connecticut 06520

Dr. Abraham R. Wagner
Analytical Assessments Corp.
357 South Robertson Blvd.
Beverly Hills, California 90211

Dr. J. Wilkenfeld
Department of Government & Politics
College Park, Maryland 20742

Air Force

AFOSR/NL
Bldg., 410
Bolling AFB
Washington, DC   20332

Military Assistant for Human Resources
OAD (E&LS) ODDR&E
Pentagon 3D129
Washington, DC   20301

HQ, USAF
AFMPC/DPMYP
Randolph AFB, TX   78148

Air University Library/LSE-8110
Maxwell AFB, AL   36112

Army

Office of the Deputy Chief of Staff
  for Personnel, Research Office
ATTN:  DAPE-PBR
Washington, DC   20310

Chief, Plans & Operations Office
USA Research Institute for the
  Behavioral & Social Sciences
Room 278
1300 Wilson Blvd.
Arlington, VA   22209

Army Research Institute   (2 cys)
5001 Eisenhower Ave.
Alexandria, VA 22333

ARI Field Unit -- Leavenworth
P.O. Box 3122
Fort Leavenworth, KS   66027

Headquarters, Forces Command
AFPE-HR
Ft. McPherson
Atlanta, GA   30330

Marine Corps

Dr. A. L. Slafkosky
Code RD-1
HQ US Marine Corps
Washington, DC   20380

Marine Corps Cont'd

Commandant of the Marine Corps
(Code MPI-20)
Washington, DC   20380

Coast Guard

Chief, Psychological Research Branch
US Coast Guard (G-P-1/62)
400 7th St. SW
Washington, DC   20590

Navy

Chief of Naval Personnel
Assistant for Research Liaison (Pers-Or)
Washington, DC   20370

Bureau of Naval Personnel (Pers 6)
Assistant Chief of Naval Personnel for
  Human Resource Management
Washington, DC   20370

Bureau of Naval Personnel (Pers-6a3)
Human Resource Management Financial Office
Washington, DC   20370

CDR Paul D. Nelson, MSC, USN
Head, Human Performance Division (Code 44)
Navy Medical R&D Command
Bethesda, MD   20014

Assistant Officer in Charge
Naval Internal Relations Activity
Pentagon, Room 2E329
Washington, DC   20350

Naval Postgraduate School
Monterey, CA   93940
ATTN:  Library (Code 2124)

Professor John Senger
Operations Research & Administration
  Sciences
Naval Postgraduate School
Monterey, CA   93940

DR Robert S. Kennedy
Head, Human Factors Engineering Branch
(1242)
USN Pacific Missile Center
Pt. Mugu, CA 93042

Training Officer
Human Resource Management Center
San Diego, CA 92133 NTC

Scientific Director
Naval Health Research Center
San Diego, CA 92152

Navy Personnel R&D Center (5 cys)
Code 01
San Diego, CA 92152

Commanding Officer
Naval Submarine Medical Research Lab.
Naval Submarine Base New London, Box 900
Groton, CT 06340

Commanding Officer
Naval Training Equipment Center
Technical Library
Orlando, FL 32813

Naval Aerospace Medical Research Lab.
(Code L5)
Naval Aerospace Medical Center
Pensacola, FL 32512

Lt. Rebecca G. Vinson, U.S.N.
Navy Recruiting District, Boston
575 Technology Square
Cambridge, MA 02139

Chief, Naval Technical Training
NAS Memphis (75)
Millington, TN 38054
ATTN: Mr. Tom Warrick, N622

Dr. C. Brooklyn Derr
Associate Professor, Code 55
Naval Postgraduate School
Monterey, CA 93940

Human Resource Management Center
Box 23,
FPO New York 09510

Human Resource Management Center, Norfolk
5621-23 Tidewater Drive
Norfolk, VA 23511

Human Resource Management Center
Bldg., 304
Naval Training Center
San Diego, CA 92133

Office of Naval Research (Code 200)
Arlington, VA 22217

ACOS Research & Program Development
Chief of Naval Education & Training (N-5)
Naval Air Station
Pensacola, FL 32508

Human Resource Management Center
Pearl Harbor
FPO San Francisco, CA 96601

Human Resource Management School
Naval Air Station Memphis (96)
Millington, TN 38054

Capt. Bruce Stone, U.S.N.
Director, Programs Development Division
(Code N-35)
Chief of Naval Education & Training
Naval Air Station
Pensacola, FL 32508

Capt. Charles Baldwin
Bureau of Naval Personnel
Pers 65
Washington, DC 20370

Director, Human Resource Training Department
Naval Amphibious School
Little Creek
Naval Amphibious Base
Norfolk, VA 23521

Navy Materiel Command
Employee Development Office (Code SA-65)
Room 150 Jefferson Plaza, Bldg., #2
1429 Jeff Davis Highway
Arlington, VA 20360

Human Resource Management Center, Washington
Washington, DC 20370

Other

Ms. Elsa A. Porter
Clearinghouse on Productivity &
  Organizational Effectiveness
U.S. Civil Service Commission
Washington, DC  20415

Dr. Robert B. Tebbs
Franklin University
201 South Grant Ave.
Columbus, OH  43215

HumRRO (ATTN: Library)
300 N. Washington St.
Alexandria, VA  22314

Director, Columbus Office
HumRRO Central Division, Suite 23
2601 Cross Country Dr.
Columbus, GA  31906

Office of the Air Attache
Embassy of Australia
1601 Massachusetts Ave., NW
Washington, DC  20036

Scientific Information Officer
British Embassy
3100 Massachusetts Ave., NW
Washington, DC  20008

Canadian Defense Liaison Staff, Washington
2450 Massachusetts Ave., NW
Washington, DC  20008
ATTN:  Chief, Defense Research

Dr. Lennart Levi, Director
Lab. for Clinical Stress Research, Fack
S-104 01 Stockholm, SWEDEN

Mr. Luigi Petrullo
2431 N. Edgewood St.
Arlington, VA  22207

Dr. John J. Collins
6305 Caminito Estrellado
San Diego, CA  92120

Other Cont'd

Commanding Officer
1 Psychological Research Unit
Chancery House
485 Bourke St.
Melbourne vic 3000
AUSTRALIA